



Ifu

Our Reference: VTE-152-B

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John Bugel, Jeff Moler & Mark Oudshoorn
Serial Number: 10/817,511
Filing Date: April 2, 2004
Examiner/Art Group Unit: Unknown/3745
Title: MULTI-LEVEL FLUID OPERATED
CYLINDER POSITIONING SYSTEM

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. § 1.97

Mail Stop - Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The references listed in the attached form PTO-1449 are cited pursuant to Rule 37 C.F.R. 1.56 to meet the duty to disclose to the Patent Office all information known to the inventor, attorney or any other person who is substantively involved in the preparation or prosecution of the application or who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

If a written English-language translation of a non-English language document, or portion thereof, is within the possession, custody or control of, or is readily available to any individual designated in § 1.56(c), a copy of the translation accompanies this Statement.

Pursuant to 37 C.F.R. § 1.97(c) and (e)(1) this Information Disclosure Statement includes the following Certification that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing date of this Statement.

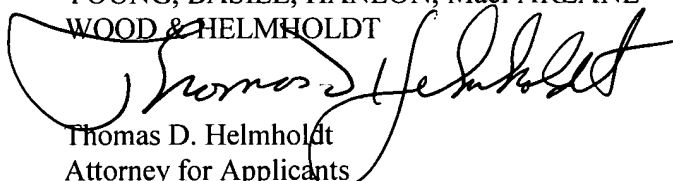
If applicable, copies of the International Search Report and any foreign patent office Search Report are enclosed for the Examiner's use, and these reports indicate the relevance of the cited references according to the respective search authorities.

A copy of each cited reference is not enclosed pursuant to United States Patent and Trademark Office OG Notices: 05 August 2003 which waives the requirement to submit a copy of each cited U.S. Patent and U.S. Patent Application Publication for all U.S. National Patent Applications filed after June 30, 2003.

These references constitute all the information of which the individuals pursuant to 37 C.F.R. § 1.56(c) are currently aware.

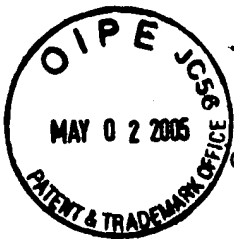
Respectfully submitted,

YOUNG, BASILE, HANLON, MacFARLANE
WOOD & HELMHOLDT



Thomas D. Helmholdt
Attorney for Applicants
Registration No. 33181
(248) 649-3333

3001 West Big Beaver Rd., Suite 624
Troy, Michigan 48084-3107
Dated: 4/29/2005
TDH/TMS/jml



Our Reference: VTE-152-B

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John Bugel, Jeff Moler & Mark Oudshoorn
Serial Number: 10/817,511
Filing Date: April 2, 2004
Examiner/Art Group Unit: Unknown/3745
Title: MULTI-LEVEL FLUID OPERATED
CYLINDER POSITIONING SYSTEM

CERTIFICATE OF MAILING AND TRANSMITTAL LETTER

Mail Stop - Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

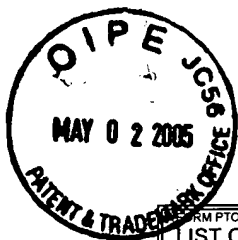
Transmitted with this document is a Supplemental Information Disclosure Statement, PTO Form 1499, copies of 4 foreign patents (GB2203195A, DE10122297C1, EP1391647, DE19912334A1), copies of 2 International Search Reports, copies of 20 other references list on the PTO Form 1499 and a Postcard in the above-identified application.

- X No additional fee is required.
- X Please charge any deficiency or credit any excess in the enclosed fees to Deposit Account Number 25-0115.
- X Applicant(s), and the Assignee (if applicable), hereby assert a claim to small entity status under 37 CFR 1.27 et. seq.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop - Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on April 29, 2005.

Thomas D. Helmholdt
Attorney for Applicant
Registration No. 33,181
(248) 649-3333

YOUNG & BASILE, P.C.
3001 West Big Beaver Road
Suite 624
Troy, MI 48084-310



Sheet 1 of 2

LIST OF REFERENCES CITED BY APPLICANT	ATTY. DOCKET NO. VTE-152-B	SERIAL NO. 10/817,511
	APPLICANT John Bugel	
	FILING DATE April 2, 2004	GROUP 3475

U. S. PATENT DOCUMENT

EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
	AA	6,523,451	02-25-2003	Liao et al.			
	AB	6,234,060	05-22-2001	Jolly			
	AC	5,881,767	03-16-1999	Loser			
	AD	5,431,086	07-1995	Morita et al.			
	AE	5,271,226	12-21-1993	Stone			
	AF						

FOREIGN PATENT OR PUBLISHED PATENT APPLICATION

		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
	AL	GB2203195A	10-1988	UK			
	AM	DE 101 222 97C1	06-2002	Germany			
	AN	EP 1 391 647	06-17-2003	Europe			
		DE 199 12 334 A1	09-28-2000	Germany			

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

		Kenji Okiyama and Ken Ichiryu; STUDY OF PNEUMATIC MOTION BASE CONTROL CHARACTERISTICS; Tokyo University of Technology
	AO	Karim Khayati, Pascal Bigras, and Louis-A. Dessaint; NONLINEAR CONTROL OF PNEUMATIC SYSTEMS; Ecole de Technologie Supérieure; 1100, rue Notre-Dame Ouest, Montreal (Quebec) H3C 1K3
	AP	HIGH SPEED SERVO PNEUMATIC ACTUATOR SYSTEMS; (modified on 13 January 2004); Design of High Speed Machinery (DHSM) LINK Programme; Engineering & Physical Sciences Research Council; Department of Trade & Industry; March 1995 to August 1997, Grant Reference: GR/K38663
	AR	Journal of Zhejiang University SCIENCE; (ISSN 1009-3095, Monthly), 2001 vol. 2, no. 2, pages 128-131; CLC Number: TP271, 32: Document Code: A; RESEARCH ON THE CONTINUOUS POSITIONING CONTROL TO SERVO-PNEUMATIC SYSTEM; Tao Guo-liang, Wang Xuan-yin, & Lu Yong-xiang
	AS	MODELING AND SIMULATION OF A SERVOPNEUMATIC GRIPPER; Salvador Esque and Jose LM Lastra, date 10 Dec 99
	AT	MODIFIED FEEDBACK LINEARIZATION CONTROLLER FOR PNEUMATIC SYSTEM WITH NON-NEGLECTIBLE CONNECTION PORT RESTRICTION; Pascal Bigras, Karim Khayati, Tony Wong; University of Quebec
	AU	ND9000 INTELLIGENT VALVE CONTROLLER; METSO AUTOMATION; date: July 7/2003

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.

FORM PTO-1449 LIST OF REFERENCES CITED BY APPLICANT		ATTY. DOCKET NO. VTE-152-B	SERIAL NO. 10/817,511
		APPLICANT John Bugel	
		FILING DATE April 2, 2004	GROUP 3745
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)			
	AF	INTRODUCING PRECISIONAIRE – A BREAKTHROUGH PNEUMATIC MOTION SYSTEM	
	AG	AXIS CONTROLLER SPC 200; Festo AG&Co.; Products 2001	
	AH	KUHNKE "SPEEDY" Machine Building Process Module; Switched Pneumatic Electrical Endposition Damping-E635 GM/02 92.652	
	AI	SWITCHED PNEUMATIC ELECTRICAL ENDPOSITION DAMPING; Werner Brockman; University of Lubeck Institute of Computer Engrg. Lubeck, Germany	
	AJ	BLOCK-ORIENTED NONLINEAR CONTROL OF PNEUMATIC ACTUATOR SYSTEMS; fulin Xiang; Doctoral Thesis, Mechatronics Lab, Department of Machine Design, Royal Institute of Technology, KTH; S-100 44, Stockholm, Sweden, 2001.	
	AK	HYDRAULIC & PNEUMATIC ACTUATORS; Sensors & Actuators for Mechatronics Hydraulic and Pneumatic Actuators; K. Craig.	
	AL	ADAPTIVE NEURON CONTROL BASED ON PREDICTIVE MODEL IN PNEUMATIC SERVO SYSTEM; Huang Wenmei, Yang Yong, Tang Yali; College of Mechanical and Automotive Engrg. Hunan University, 410082, Changsha, Huna, P.R. China.	
	AM	PROPNEU – AN INTELLIGENT SOFTWARE TOOL; Hong Zhou, Ph.D., Festo AG & Co., Ruitersstr, 82, D-73734, Esslingen, Germany	
	AN	PNEUMATIC SERVO SYSTEMS CONTROLLED BY SELF-TUNING FUZZY RULES; Akira Shimizu, Satoru Shibata, and Mitsuru Jindai, Dept. of Mech. Eng. Ehime University, 3, Bunkyo-cho, 790-8577, Matsuyama, Ehime, Japan.	
	AO	MODELICA – Proceedings of the 3 rd International Modelica Conference, Linkoping, November 3-4, 2003, Peter Fritzson (editor)	
	AP	HIGH STEADY-STATE ACCURACY PNEUMATIC SERVO POSITIONING SYSTEM WITH PVA/PV CONTROL AND FRICTION COMPENSATION; Shu Ning and Gary M. Bone; Dept. of Mechanical Engrg., McMaster University, Hamilton, Ontario, Canada, L8S 4L7. Proceedings of the 2002 IEEE, International Conference on Robotics & Automation, Washington, DC – May 2002	
	AR	A HYBRID PNEUMATIC/ELECTROSTATIC MILI-ACTUATOR; Kenneth H. Chiang, Ronald S. Fearing; ROBOTICS AND INTELLIGENT MACHINES LABORATORY; Dept. of Electrical Engrg. And Computer Sciences; 265M Cory Hall, University of California, Berkeley, CA 94720-1770	
	AS	MODELING IDENTIFICATION, AND CONTROL OF A PNEUMATICALLY ACTUATED, FORCE CONTROLLABLE ROBOT; J.E. Bobrow and B.W. McDonell; Irvine, California 92697	
	AT	MODELLING AND SIMULATION OF PNEUMATIC CYLINDERS FOR A PHYSIOTHERAPY ROBOT; R. Richardson, A.R. Plummer, M. Brown; School of Mechanical Engrg., University of Leeds, UK; Instron Ltd., UK	
EXAMINER		DATE CONSIDERED	
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.			